

Project Title	Funding	Institution
Neurobiological mechanism of 15q11-13 duplication autism spectrum disorder	\$367,304	Beth Israel Deaconess Medical Center
TMLHE deficiency and a carnitine hypothesis for autism	\$60,000	Baylor College of Medicine
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	\$149,999	King's College London
Genetic and developmental analyses of fragile X mental retardation protein	\$378,771	Vanderbilt University Medical Center
A longitudinal MRI study of brain development in fragile X syndrome	\$549,582	University of North Carolina at Chapel Hill
Revealing protein synthesis defects in fragile X syndrome with new chemical tools	\$337,091	Stanford University
Functional and anatomical recovery of synaptic deficits in a mouse model of Angelman Syndrome	\$58,000	University of North Carolina at Chapel Hill
MeCP2 modulation of BDNF signaling: Shared mechanisms of Rett and autism	\$303,067	University of Alabama at Birmingham
New approaches to local translation: SpaceSTAMP of proteins synthesized in axons	\$401,927	Dana-Farber Cancer Institute
Language development in fragile X syndrome	\$509,862	University of California, Davis
Olfactory abnormalities in the modeling of Rett syndrome	\$339,270	Johns Hopkins University
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	\$149,967	Boston Children's Hospital
Characterizing 22q11.2 abnormalities	\$62,498	Children's Hospital of Philadelphia
Dysregulation of protein synthesis in fragile X syndrome	\$1,089,880	National Institutes of Health
Aberrant synaptic form and function due to TSC-mTOR-related mutation in autism spectrum disorders	\$150,000	Columbia University
Presynaptic Fragile X Proteins	\$249,000	Drexel University
Elucidation and rescue of amygdala abnormalities in the Fmr1 mutant mouse model of fragile X syndrome	\$0	George Washington University
Synaptic phenotype, development, and plasticity in the fragile X mouse	\$379,329	University of Illinois at Urbana Champaign
Allelic choice in Rett syndrome	\$374,862	Winifred Masterson Burke Medical Research Institute
Predicting phenotypic trajectories in Prader-Willi syndrome	\$294,904	Vanderbilt University Medical Center
Grammatical development in boys with fragile X syndrome and autism	\$141,075	University of Wisconsin - Madison
Investigation of protocadherin-10 in MEF2- and FMRP-mediated synapse elimination	\$55,670	University of Texas Southwestern Medical Center
Dysregulation of mTOR signaling in fragile X syndrome	\$467,760	Albert Einstein College of Medicine of Yeshiva University
Bi-directional regulation of Ube3a stability by cyclic AMP-dependent kinase	\$60,000	University of North Carolina at Chapel Hill
Neural mechanisms underlying autism behaviors in SCN1A mutant mice	\$194,903	University of Washington
Regulation of cortical critical periods in a mouse model of autism	\$0	Northwestern University
Mechanisms of motor skill learning in the fragile X mouse model	\$292,423	University of Nebraska Medical Center
Multigenic basis for autism linked to 22q13 chromosomal region	\$250,000	Hunter College of the City University of New York (CUNY) jointly with Research Foundation of CUNY

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Testing the ribosomal protein S6 as treatment target and biomarker in autism spectrum disorders	\$60,000	Cincinnati Childrens Hospital Medical Center
Role of astrocytic glutamate transporter GLT1 in Fragile X	\$5,000	Tufts University
Connections between autism, serotonin and hedgehog signaling	\$124,401	Medical Research Council-National Institute for Medical Research
Novel candidate mechanisms of fragile X syndrome	\$249,000	University of Michigan
Physiological studies in a human stem cell model of 15q duplication syndrome	\$60,000	University of Connecticut
Studying Rett and Fragile X syndrome in human ES cells using TALEN technology	\$30,000	Whitehead Institute for Biomedical Research
Probing synaptic receptor composition in mouse models of autism	\$249,995	Boston Children's Hospital
Probing the neural basis of social behavior in mice	\$125,000	Massachusetts Institute of Technology
The role of Fox-1 in neurodevelopment and autistic spectrum disorder	\$145,757	University of California, Los Angeles
BDNF and the restoration of synaptic plasticity in fragile X and autism	\$449,134	University of California, Irvine
The microRNA pathway in translational regulation of neuronal development	\$340,304	University of Massachusetts Medical School
The role of UBE3A in autism	\$250,001	Harvard Medical School
Genotype-phenotype relationships in fragile X families	\$565,457	University of California, Davis
Mechanisms of synapse elimination by autism-linked genes	\$240,115	University of Texas Southwestern Medical Center
Mechanisms of mGluR5 function and dysfunction in mouse autism models	\$393,841	University of Texas Southwestern Medical Center
Translational dysregulation in autism pathogenesis and therapy	\$125,000	Massachusetts General Hospital
MicroRNAs in synaptic plasticity and behaviors relevant to autism	\$131,220	Massachusetts General Hospital
Cortico-striatal dysfunction in the eIF4E transgenic mouse model of autism	\$61,999	New York University
The role of MeCP2 in Rett syndrome	\$344,213	University of California, Davis
A family-genetic study of autism and fragile X syndrome	\$593,966	Northwestern University
Longitudinal MRI study of brain development in fragile X	\$748,506	Stanford University
Cortactin and spine dysfunction in fragile X	\$32,875	University of California, Irvine
The role of genetics in communication deficits in autism spectrum disorders	\$0	University of Pennsylvania
Genetic contribution to language-related preclinical biomarkers of autism	\$63,513	University of Pennsylvania
Motor cortex plasticity in MeCP2 duplication syndrome	\$125,000	Baylor College of Medicine
Understanding the basic neurobiology of Pitt-Hopkins syndrome	\$0	The University of Alabama at Birmingham
Modulation of RhoA signaling by the mRNA binding protein hnRNPQ1	\$30,912	Emory University
Translational regulation of adult neural stem cells	\$359,977	University of Wisconsin - Madison
Role of Sema7A in functional organization of neocortex	\$366,120	Mount Sinai School of Medicine
Pleiotropic roles of dyslexia genes in neurodevelopmental language impairments	\$36,724	Yale University
Cerebellar plasticity and learning in a mouse model of autism	\$0	The University of Chicago

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Genetically defined stem cell models of Rett and fragile X syndrome	\$350,000	Whitehead Institute for Biomedical Research
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	\$141,976	Case Western Reserve University
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	\$62,314	Stanford University
Mesocorticolimbic dopamine circuitry in mouse models of autism	\$349,295	Stanford University
A stem cell based platform for identification of common defects in autism spectrum disorders	\$0	The Scripps Research Institute - California
Mechanism of UBE3A imprint in neurodevelopment	\$7,869	University of California, Davis
Emergence and stability of autism in fragile X syndrome	\$343,680	University of South Carolina
Phagocytosis is misregulated in a Drosophila model of Fragile X syndrome	\$47,232	Columbia University
RNA expression at human fragile X synapses	\$59,217	University of North Carolina at Chapel Hill and North Carolina State University
Modeling Pitt-Hopkins Syndrome, an Autism Spectrum Disorder, in Transgenic Mice Harboring a Pathogenic Dominant Negative Mutation in TCF4	\$0	University of North Carolina, Chapel Hill
Astrocyte function in genetic mouse models of autism spectrum disorders	\$394,063	Cleveland Clinic Lerner College of Medicine, Case Western Reserve University
Mechanisms Underlying the Cerebellar Contribution to Autism in Mouse Models of Tu	\$190,458	Boston Children's Hospital
MRI biomarkers of patients with tuberous sclerosis complex and autism	\$720,276	Boston Children's Hospital
Role of Serotonin Signaling during Neural Circuitry Formation in Autism Spectrum Disorders	\$0	Massachusetts Institute of Technology
Linking genetic mosaicism, neural circuit abnormalities and behavior	\$62,500	Brown University
Phenotypic characterization of MECP2 mice	\$64,742	Children's Hospital of Philadelphia
A Novel Glial Specific Isoform of Cdkl5: Implications for the Pathology of Autism in Rett Syndrome	\$0	University of Nebraska Medical Center
Fragile X syndrome target analysis and its contribution to autism	\$259,025	Vanderbilt University
Role of GABA interneurons in a genetic model of autism	\$62,500	Yale University
mTOR modulation of myelination	\$178,659	Vanderbilt University Medical Center
A novel essential gene for human cognitive function	\$47,232	Harvard Medical School
Mouse Model of Dup15q Syndrome	\$84,253	Texas AgriLife Research
The role of UBE3A in autism: Is there a critical window for social development?	\$54,450	Erasmus University Medical Center
Translation, synchrony, and cognition	\$375,588	New York University
Linking circuit dynamics and behavior in a rat model of autism	\$0	University of California, San Francisco
Analysis of MEF2 in cortical connectivity and autism-associated behaviors	\$49,214	Harvard Medical School
Alteration of Dendrite and Spine Number and Morphology in Human Prefrontal Cortex of Autism	\$25,000	University of California, Davis

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Pragmatic language and social-emotional processing in autism, fragile X, and the FMR1 premutation	\$29,474	Northwestern University
Role of ME2 and neural activity in cortical synaptic weakening and elimination	\$415,385	University of Texas Southwestern Medical Center
Understanding the Genetic Architecture of Rett Syndrome - an Autism Spectrum Disorder	\$0	Cold Spring Harbor Laboratory
GABA and Gamma-band Activity: Biomarker for ASD?	\$25,000	University of Pennsylvania
Probing the Molecular Mechanisms Underlying Autism: Examination of Dysregulated Protein Synthesis	\$49,300	National Institute of Mental Health (NIH)
16p11.2 rearrangements: Genetic paradigms for neurodevelopmental disorders	\$100,000	University of Lausanne
Restoring cortical plasticity in a Rett mouse model	\$60,000	Stanford University
Auditory cortical plasticity in a mouse model of Rett syndrome	\$43,501	Cold Spring Harbor Laboratory

